



PATENT COOPERATION TREATY

PCT/IB2005/000441

From the INTERNATIONAL BUREAU

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)

(PCT Rule 44bis.1(c))

To:

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Via Larga, 16
I-20122 Milan
ITALIEDate of mailing (day/month/year)
14 September 2006 (14.09.2006)Applicant's or agent's file reference
04692E38

IMPORTANT NOTICE

International application No.
PCT/IB2005/000441International filing date (day/month/year)
22 February 2005 (22.02.2005)Priority date (day/month/year)
03 March 2004 (03.03.2004)

Applicant

THERMO ELECTRON S.p.A. et al

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

| | | |
|--|---|--|
| Applicant's or agent's file reference 04692E38 | FOR FURTHER ACTION | See item 4 below |
| International application No. PCT/IB2005/000441 | International filing date (<i>day/month/year</i>) 22 February 2005 (22.02.2005) | Priority date (<i>day/month/year</i>) 03 March 2004 (03.03.2004) |
| International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237 | | |
| Applicant THERMO ELECTRON S.p.A. | | |

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).
2. This REPORT consists of a total of 13 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.
3. This report contains indications relating to the following items:

| | |
|--|---|
| <input checked="" type="checkbox"/> Box No. I | Basis of the report |
| <input checked="" type="checkbox"/> Box No. II | Priority |
| <input type="checkbox"/> Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> Box No. VI | Certain documents cited |
| <input type="checkbox"/> Box No. VII | Certain defects in the international application |
| <input checked="" type="checkbox"/> Box No. VIII | Certain observations on the international application |
4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

| | |
|---|---|
| The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland | Date of issuance of this report 05 September 2006 (05.09.2006) |
| Facsimile No. +41 22 338 82 70 | Authorized officer <div style="text-align: center; font-weight: bold; font-size: 1.2em;">Cecile Chatel</div> e-mail: pt13@wipo.int |

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

REC'D 13 JUN 2005

PCT

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/IB2005/000441

International filing date (day/month/year)
22.02.2005

Priority date (day/month/year)
03.03.2004

International Patent Classification (IPC) or both national classification and IPC
G01N30/24, G01N1/00, G01N35/10

Applicant
THERMO ELECTRON S.P.A.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2005/000441

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

Box No. II Priority

1. ☒ The validity of the priority claim has not been considered because the International Searching Authority does not have in its possession a copy of the earlier application whose priority has been claimed or, where required, a translation of that earlier application. This opinion has nevertheless been established on the assumption that the relevant date (Rules 43*bis*.1 and 64.1) is the claimed priority date.
2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2005/000441

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-------------|------|
| Novelty (N) | Yes: Claims | |
| | No: Claims | 1-11 |
| Inventive step (IS) | Yes: Claims | |
| | No: Claims | 1-11 |
| Industrial applicability (IA) | Yes: Claims | 1-11 |
| | No: Claims | |

2. Citations and explanations

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1.

Reference is made to the following documents:

- D1: WO 01/84143 A (THERMO FINNIGAN, LLC; LADINE, JAMES, R; JARDINE, IAN; STORY, MIKE, S) 8 November 2001 (2001-11-08)
D2: US 2001/027949 A1 (SAFIR ADAM ET AL) 11 October 2001 (2001-10-11)
D3: "ASI-100 AND ASI-100T AUTOSAMPLERS"[Online] - 2002 pages 1-6, XP002329480 DIONEX Retrieved from the Internet: URL:www.dionex.com>

2.

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1 and 8 is not new in the sense of Article 33(2) PCT.

2.1

Claim 1:

2.1a

Document D1 discloses (the references in parentheses applying to this document):

An automatic sampler (in each one of a plurality of LC-MS systems, see Fig. 3, p. 9, lines 10-11 and p. 21, lines 24-28, D1) of the type functionally associable with two instruments for chromatographic analysis (the columns of a two-dimensional microcapillary HPLC system, see p. 21, lines 29-30, D1) and with a plurality of containers of samples (the wells of a microtitre plate, see p. 9, lines 4-9, D1) to be subjected to chromatographic analysis (see Fig. 5, D1), wherein the autosampler can be interfaced with two independent data systems (the central computer 14, Fig. 3, D1 and the individual computer in the corresponding LC/MS system, see p. 24, lines 7-10, D1) for data acquisition and processing, and for the control/management of said automatic sampler (see p. 17, lines 1-8, p. 16, lines 8-12, p. 12, lines 28-30, p. 21, line 24-27, D1).

The subject matter of claim 1 is thus known from D1 (Art. 33(2) PCT).

2.1b

The subject matter of claim 1 is also known from document D2 (Art. 33(2) PCT), see paragraph [0176] and Fig. 7B, D2.

2.1c

Finally, the subject matter of claim 1 can also be interpreted as defining an autosampler known from D3, comprising two serial interfaces (see the specifications on p. 4, D3).

The subject matter of claim 1 is thus known from D3 (Art. 33(2) PCT).

2.2

Claim 8:

Document D1 also discloses the method of claim 8, since the dedicated computer of a given LC/MS system according to D1 initiates its own predefined sampling sequence in the course of tandem analysis by activating its corresponding autosampler (see p. 21, line 24 to p. 22, line 6 and p. 12, line 27-30, D1).

The subject matter of claim 8 is thus known from D1 (Art. 33(2) PCT).

3.

Dependent claims 2-7, 9-11 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty (Art. 33(2) PCT), see documents D1-D3.

Re Item VIII

Certain observations on the international application

Lack of clarity (Art. 6 PCT):

1.

The characterizing feature in claim 1 "it can be interfaced with two or more independent data systems ..." does not introduce any limitation of scope with respect to known commercial autosamplers, especially since simultaneous interfacing is not required. Even so, the term "interfaced" is so vague as to allow many non-limiting interpretations (according to The Oxford English Dictionary, an interface is "*a device or program for connecting two items of hardware or software so that they can be operated jointly or communicate with each other*"). Similar objections apply to the feature "*of the type functionally associable with two instruments*".

2.

Claims 2-7 as formulated do not further define an autosampler according to claim 1; these claims can be interpreted instead as defining features of a system to which the autosampler belongs. The limitations sought are thus unclear.

3.

The formulation of claim 8 - lines 8-9 and following - is inconsistent when exactly two independent data systems are selected.

4.

In claim 8, any two of the three alternatives given on lines 10-18 can be dropped when interpreting the claim. As a result thereof, two of the three corresponding sampling sequences as defined in lines 4-9 do not bear any technical relationship with the other features of the claim, the significance of which is thus unclear.

**** Transmit Conf. Report ****

P.1

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Milan, October 3, 2006

E-mail + SPECIAL DELIVERY

Re: US Patent Application No.
(EX-PCT/IB2005/000441 filed on 22.02.2005)
"An automatic sampler associable with chromatographic analysis
instruments"
Applicant: Thermo Electron S.p.A.
Our ref.: GM/sc 00354E38 - Your ref.: 3687-179

Dear Sirs,

Please find herewith enclosed a copy of the "International Preliminary
Report of Patentability" relating to the PCT/IB2005/000441.

Please acknowledge safe receipt of this document by return facsimile

Thank you in advance for your co-operation, we remain

Yours faithfully

MARIETTI, GISLON e TRUPIANO S.r.l.

Giuseppe Marietti

Encl.

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